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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,076	02/20/2004	David A. Voeller	HE 8568U1	7013
1688	7590	09/22/2005	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			GARLAND, STEVEN R	
			ART UNIT	PAPER NUMBER
			2125	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/784,076

Applicant(s)

VOELLER, DAVID A.

Examiner

Steven R. Garland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/20/04, 5/7/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 32-35 is/are rejected.
- 7) ☒ Claim(s) 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/7/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The information disclosure statement submitted 5/7/04 has been considered to the extent indicated. The documents crossed out all lacked any publication date.
2. Remarks: the form PTO-1449 submitted by applicant on 5/7/04 in the right hand upper corner has "Sheet 1 of 2 " which has been crossed out, since only one sheet was submitted.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 112 mentioned in paragraph 0033. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
4. The disclosure is objected to because of the following informalities: on page 18, line 1, "CLAIMS" should be changed to -- I claim:--.

Appropriate correction is required.

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5. The use of the trademarks Bluetooth and VoiceXML have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 5, 9, 17-20, and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, it is indefinite what the phrase " a Bluetooth communication protocol " means. Similar comments apply to the VoiceXML of claims 5 and 18.

Claim 17, line 2, "the central processor " lacks a proper antecedent basis. Claim 24, line 6, has a similar problem and also note line 9 in claim 24.

Claim 26, lines 2-3, " said low frequency voice signal " and in line 4, "said wideband voice signal" both lack a proper antecedent basis. It appears claim 26 should depend on claim 25.

The remaining claims fall with the parent claims.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Voeller et al. 2003/0055535 cited by applicant.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

See the abstract, figures, paragraphs 0009,0011,0024,0030-0034,0037-0042 and the claims.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1,2,4-8, 10-23, 25-30, and 32-35 are rejected under 35 U.S.C. 103(a) as being obvious over Voeller et al. 2003/0055535 in view of Kruger 5,692,059.

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The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Voeller et al. teach a voice interface for a wheel alignment system. The system includes a cpu 100, software, microphones, speakers 212, and uses Voice XML. Voeller also teaches noise reduction using plural microphones, use of trigger words, wireless communication, use of a headset, and phonetically distinct words. See the abstract, figures, paragraphs 0009,0011,0024,0025,0030-0034,0037-0042 and the claims.

Voeller however does not teach the use of a contact microphone and an air microphone.

Kruger teaches the use of the combination of a contact microphone for low frequencies and an air microphone to sense high speech frequencies. Kruger teaches that the combination reduces noise sensitivity and also teaches the use of noise filtering. See the abstract, figures, col. 1, lines 5-58; col. 3, lines 39-67; col. 4, lines 7-24; col. 5, line 18 to col. 6, line 57; and the claims.

It would have been obvious to one of ordinary skill in the art to modify Voeller in view of Kruger and use the combined microphone of Kruger to input voice commands into the alignment system of Voeller. This would reduce background noise, reduce the number of required microphones, and also allow the operator more freedom in motion.

Voeller and Kruger however fail to specifically show the use of a switch associated with the filtering.

It would have been obvious to one of ordinary skill in the art to modify Voeller and Kruger and provide a switch associated with the filter to turn the device on and off and not waste power.

12. Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Casby et al. 6,085,428, cited by applicant

Casby et al. teaches voice control of a wheel alignment device. Casby teaches use of a microphone, speaker, speech processing, headset, wireless communication, central processing unit, software including software in a module. See the abstract; figures; col. 1, lines 10-16 and 40-67; col. 2, lines 7-11 and 31-67; col. 3, line 21 to col. 4, line 41; col. 5, lines 5-60; and the claims.

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13. Claims 1,3,8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casby et al. 6,085,428 in view of Anderson 6,594,370.

Casby et al. teaches voice control of a wheel alignment device. Casby teaches use of a microphone, speaker, speech processing, headset, wireless communication, central processing unit, software including software in a module. See the abstract; figures; col. 1, lines 10-16 and 40-67; col. 2, lines 7-11 and 31-67; col. 3, line 21 to col. 4, line 41; col. 5, lines 5-60; and the claims.

Casby et al. however fails to teach the use of a throat microphone or Bluetooth communication.

Anderson teaches a throat microphone and Bluetooth communication for enhanced performance and adding functions. See the abstract; figures; and col. 3, line 46 to col. 4, line 5.

It would have been obvious to one of ordinary skill in the art to modify Casby in view of Anderson and use a throat microphone and standard Bluetooth communication for improved performance and also add additional functions.

14. Claims 1,2,4,6-8,10-17,19-30, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casby et al. 6,085,428 in view of Kruger 5,692,059.

Casby et al. teaches voice control of a wheel alignment device. Casby teaches use of a microphone, speaker, speech processing and speech generation, headset, wireless communication, central processing unit, software including software in a module, use of trigger words and phonetically distinct words such as passwords or trigger words, and audio associated with the alignment procedure. See the abstract;



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figures; col. 1, lines 10-16 and 40-67; col. 2, lines 7-11 and 31-67; col. 3, line 21 to col. 4, line 41; col. 5, line 5 to col. 6, line 6; and the claims.

Casby however fails to teach the use of a contact microphone and air microphone.

Kruger teaches the use of an earpiece having a combination of a contact microphone for low frequencies and an air microphone to sense high speech frequencies. Kruger teaches that the combination reduces noise sensitivity and also teaches the use of noise filtering. See the abstract, figures, col. 1, lines 5-58; col. 3, lines 39-67; col. 4, lines 7-24; col. 5, line 18 to col. 6, line 57; and the claims.

It would have been obvious to one of ordinary skill in the art to modify Casby in view of Kruger and use the combination microphone of Kruger to generate voice commands in a noisy workshop environment.

15. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casby et al. 6,085,428 in view of Kruger 5,692,059 as applied to claims 1,2,4,6-8,10-17,19-30, and 32-35 above, and further in view of Stout et al.2003/0191649 .

Casby et al. teaches voice control of a wheel alignment device. Casby teaches use of a microphone, speaker, speech processing and speech generation, headset, wireless communication, central processing unit, software including software in a module, use of trigger words and phonetically distinct words such as passwords or trigger words, and audio associated with the alignment procedure . See the abstract; figures; col. 1, lines 10-16 and 40-67; col. 2, lines 7-11 and 31-67; col. 3, line 21 to col. 4, line 41; col. 5, line 5 to col. 6, line 6; and the claims.

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Casby however fails to teach the use of a contact microphone and air microphone.

Kruger teaches the use of an earpiece having a combination of a contact microphone for low frequencies and an air microphone to sense high speech frequencies. Kruger teaches that the combination reduces noise sensitivity and also teaches the use of noise filtering. See the abstract, figures, col. 1, lines 5-58; col. 3, lines 39-67; col. 4, lines 7-24; col. 5, line 18 to col. 6, line 57; and the claims.

It would have been obvious to one of ordinary skill in the art to modify Casby in view of Kruger and use the combination microphone of Kruger to generate voice commands in a noisy workshop environment.

Casby and Kruger however fail to teach the use of VoiceXML.

Stout et al. teaches the use of VoiceXML to generate user interfaces. Note also VoiceXML trademark. See paragraphs 0002-0005.

It would have been obvious to one of ordinary skill in the art to modify Casby and Kruger to use a standard voice interface such as VoiceXML as suggested by Stout this would allow the use of a standard voice interface.

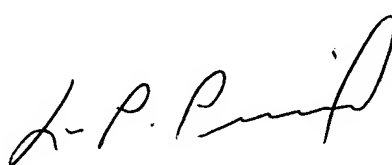
16. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R. Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Steven R Garland  
Examiner  
Art Unit 2125

9/15/05

LEO PICARD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100